

```

EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTTTTTTTTTTTTTTT
EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTTTTTTTTTTTTTTT
EEE DDD DDD TTT
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EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTT
EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTT
EEEEEEEEEEEEEEEEEE DDDDDDDDDDDDDDD TTT

```

**EXI**

Mod

[illegible]

```
WW      WW  FFFFFFFF  RRRRRRRR  EEEEEEEEE  PPPPPPP  LL      IIIIII  NN      NN
WW      WW  FFFFFFFF  RRRRRRRR  EEEEEEEEE  PPPPPPP  LL      IIIIII  NN      NN
WW      WW  FF        RR      RR  EE        PP      PP  LL      II      NN      NN
WW      WW  FF        RR      RR  EE        PP      PP  LL      II      NNNN     NN
WW      WW  FF        RR      RR  EE        PP      PP  LL      II      NNNN     NN
WW      WW  FFFFFFFF  RRRRRRRR  EEEEEEEEE  PPPPPPP  LL      II      NN  NN     NN
WW      WW  FFFFFFFF  RRRRRRRR  EEEEEEEEE  PPPPPPP  LL      II      NN  NN     NN
WW  WW  WW  FF        RR      RR  EE        PP      PP  LL      II      NN      NNNN
WW  WW  WW  FF        RR      RR  EE        PP      PP  LL      II      NN      NNNN
WWWW  WWW  FF        RR      RR  EE        PP      PP  LL      II      NN      NN
WWWW  WWW  FF        RR      RR  EE        PP      PP  LL      II      NN      NN
WW      WW  FF        RR      RR  EEEEEEEEE  PP      PP  LLLLLLLLLL  IIIIII  NN      NN
WW      WW  FF        RR      RR  EEEEEEEEE  PP      PP  LLLLLLLLLL  IIIIII  NN      NN
                                     ....
```

```
LL      IIIIII  SSSSSSSS
LL      IIIIII  SSSSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SSSSSS
LL      II      SSSSSS
LL      II      SS
LL      II      SS
LL      II      SS
LL      II      SS
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS
```

```
0001 0 XTITLE 'EDTSWFREPLIN - replace the current line'
0002 0 MODULE EDTSWFREPLIN ( ! Replace the current line
0003 0 IDENT = 'V04-000' ! File: WFREPLIN.BLI Edit: JBS1008
0004 0 ) =
0005 1 BEGIN
0006 1
0007 1 *****
0008 1 *
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0025 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
0026 1 *
0027 1 *****
0028 1
0029 1
0030 1
0031 1 ++
0032 1 FACILITY: EDT -- The DEC Standard Editor
0033 1
0034 1 ABSTRACT:
0035 1
0036 1 Replace the current line with a specified line.
0037 1
0038 1 ENVIRONMENT: Runs at any access mode - AST reentrant
0039 1
0040 1 AUTHOR: Bob Kushlis, CREATION DATE: October 16, 1978
0041 1
0042 1 MODIFIED BY:
0043 1
0044 1 1-001 - Original. DJS 23-Feb-1981. This module was created by
0045 1 extracting routine EDT$RPL LN from module EDTWF.
0046 1 1-002 - Regularize headers. JBS 19-Mar-1981
0047 1 1-003 - Change index for line numbers from 10 to 15. SMB 18-Jan-1982
0048 1 1-004 - Remove original line numbers. SMB 28-Jan-1982
0049 1 1-005 - Do most replaces without doing delete/insert, to improve
0050 1 performance, especially when updating the screen. JBS 04-Oct-1982
0051 1 1-006 - Preserve EDT$A_SEL_POS if we must delete and then insert. JBS 09-Nov-1982
0052 1 1-007 - Don't disturb the screen data base if we must delete and then insert. JBS 01-Dec-1982
0053 1 1-008 - No longer need to decrement EDT$WK_INSCNT; now done by EDT$DEL_CURLN. JBS 01-Jun-1983
0054 1 1-009 - Remove edit 1-008 : too many side effects. JBS 01-Jun-1983
0055 1
0056 1 --
```



EDT\$WFREPLIN  
V04-000

EDT\$WFREPLIN - replace the current line  
Declarations

N 13  
16-Sep-1984 02:13:03  
14-Sep-1984 12:25:42

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[EDT.SRC]WFREPLIN.BLI;1 Page 2 (2)

```

58      0057 1 XSBTTL 'Declarations'
59      0058 1
60      0059 1 TABLE OF CONTENTS:
61      0060 1
62      0061 1
63      0062 1 REQUIRE 'EDT$SRC:TRAROUNAM';
64      0501 1
65      0502 1 FORWARD ROUTINE
66      0503 1     EDT$SRPL_LN : NOVALUE;
67      0504 1
68      0505 1
69      0506 1 INCLUDE FILES:
70      0507 1
71      0508 1
72      0509 1 REQUIRE 'EDT$SRC:EDTREQ';
73      0644 1
74      0645 1
75      0646 1 MACROS:
76      0647 1
77      0648 1     NONE
78      0649 1
79      0650 1 EQUATED SYMBOLS:
80      0651 1
81      0652 1     NONE
82      0653 1
83      0654 1 OWN STORAGE:
84      0655 1
85      0656 1     NONE
86      0657 1
87      0658 1 EXTERNAL REFERENCES:
88      0659 1
89      0660 1     In the routine
```

EDT  
V04

: R  
:  
:

```
0661 1 XSBTTL 'EDT$$RPL_LN - replace the current line'
0662 1
0663 1 GLOBAL ROUTINE EDT$$RPL_LN (
0664 1     NEWLINE,
0665 1     LEN
0666 1 ) : NOVALUE =
0667 1
0668 1 ++
0669 1 FUNCTIONAL DESCRIPTION:
0670 1
0671 1     Replace the current line. If the replacement line is the same size as
0672 1     the current line, just copy the new one in its place, otherwise, delete
0673 1     the current line and insert the new one.
0674 1
0675 1 FORMAL PARAMETERS:
0676 1
0677 1     NEWLINE          a pointer to the new line
0678 1
0679 1     LEN              its length
0680 1
0681 1 IMPLICIT INPUTS:
0682 1
0683 1     EDT$$A_WK_LN
0684 1     EDT$$G_WK_MODFD
0685 1     EDT$$L_LNDO
0686 1     EDT$$A_CUR_BUF
0687 1     EDT$$A_WK_BUK
0688 1
0689 1 IMPLICIT OUTPUTS:
0690 1
0691 1     EDT$$A_WK_LN
0692 1     EDT$$A_CUR_BUF
0693 1     EDT$$A_WK_BUK
0694 1     EDT$$L_WK_INSCNT
0695 1
0696 1 ROUTINE VALUE:
0697 1
0698 1     NONE
0699 1
0700 1 SIDE EFFECTS:
0701 1
0702 1     NONE
0703 1
0704 1 --
0705 1
0706 1 BEGIN
0707 1
0708 1 EXTERNAL ROUTINE
0709 1     EDT$$DEL_CURLN : NOVALUE,
0710 1     EDT$$INS_LN : NOVALUE,
0711 1     EDT$$RD_PRVLN;
0712 1
0713 1 EXTERNAL
0714 1     EDT$$A_WK_LN : REF LIN_BLOCK,
0715 1     EDT$$G_WK_MODFD,
0716 1     EDT$$L_LNDO : LNOVECTOR [14],
0717 1     EDT$$A_CUR_BUF : REF TBCB_BLOCK,
```

```
! Replace the current line
! Address of the new line
! Length of the new line
```

```
! Pointer to current line
! Flag indicating bucket was modified
! 48-bit line numbers
! Current text buffer control block
```

```
148 0718 EDT$A_WK_BUK : REF BLOCK [WF_BUKT_SIZE, BYTE] FIELD (WFB_FIELDS),
149 0719 EDT$A_SEC_POS,      ! Select position
150 0720 EDT$G_SCR_REBUILD, ! 1 = don't touch the screen data base
151 0721 EDT$S_L_WK_INSCNT : LN_BLOCK; ! Number of records inserted during this insert sequence
152 0722
153 0723 LOCAL
154 0724     SAVE_LIN : LN_BLOCK,
155 0725     SAVE_SELPOS,
156 0726     SIZE,
157 0727     OLD_LEN,      ! Length of the old line
158 0728     SOURCE,
159 0729     REMAINING,
160 0730     SAVE_REBUILD;
161 0731
162 0732 +
163 0733 Check for a replacement which does not change the length of the
164 0734 line, and leave the work-file block structure unaltered. This
165 0735 is not done only for speed; EDT will break if it is removed.
166 0736 -
167 0737     OLD_LEN = .EDT$A_WK_LN [LIN_LENGTH];
168 0738
169 0739     IF (.OLD_LEN EQL .LEN)
170 0740     THEN
171 0741     BEGIN
172 0742     EDT$CPY_MEM (.LEN, .NEWLINE, EDT$A_WK_LN [LIN_TEXT]);
173 0743     EDT$G_WK_MODFD = 1;
174 0744     RETURN;
175 0745     END;
176 0746
177 0747 +
178 0748 Check for a replacement which neither empties the block nor causes it
179 0749 to overflow. Do such a replacement directly in the block, without
180 0750 calling the more general routines which delete and insert lines.
181 0751 -
182 0752
183 0753     IF (((.EDT$A_WK_BUK [WFB_END] - .OLD_LEN + .LEN) LSS WF_BUKT_SIZE) AND !
184 0754     (.EDT$A_CUR_BUF [TBCB_LINE_ADDR] NEQ .EDT$A_WK_BUK [WFB_END]) AND !
185 0755     (.EDT$A_CUR_BUF [TBCB_LINE_ADDR] NEQ WFB_FIXED_SIZE))
186 0756     THEN
187 0757     BEGIN
188 0758     +
189 0759     Update the character count for this buffer.
190 0760     -
191 0761     EDT$A_CUR_BUF [TBCB_CHAR_COUNT] = .EDT$A_CUR_BUF [TBCB_CHAR_COUNT] - .OLD_LEN + .LEN;
192 0762     +
193 0763     Make room in the block for the line. This may require either increasing or decreasing
194 0764     the amount of space now available.
195 0765     -
196 0766     SIZE = .OLD_LEN + LIN_FIXED_SIZE + 1;
197 0767     SOURCE = CH$PLUS (.EDT$A_WK_LN, .SIZE);
198 0768     REMAINING = .EDT$A_WK_BUK [WFB_END] - .EDT$A_CUR_BUF [TBCB_LINE_ADDR] - .SIZE;
199 0769     EDT$A_WK_BUK [WFB_END] = .EDT$A_WK_BUK [WFB_END] - .OLD_LEN + .LEN;
200 0770
201 0771     IF (.REMAINING NEQ 0) !
202 0772     THEN
203 0773     EDT$CPY_MEM (.REMAINING, .SOURCE, .EDT$A_WK_LN + .LEN + LIN_FIXED_SIZE + 1);
204 0774
```



EDTSWFREPLIN  
V04-000

EDTSWFREPLIN - replace the current line  
EDTS\$RPL\_LN - replace the current line

D 14  
16-Sep-1984 02:13:03  
14-Sep-1984 12:25:42

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[EDT.SRC]WFREPLIN.BLI;1 Page 5 (3)

```

205 0775      EDT$A_WK_LN [LIN LENGTH] = .LEN;
206 0776      CH$WCHAR 7,LEN, EDT$CPY_MEM (.LEN, .NEWLINE, EDT$A_WK_LN [LIN_TEXT]);
207 0777      EDT$G_WK_MODFD = 1;
208 0778      RETURN;
209 0779      END;
210 0780
211 0781      + This is a complex case. Delete the old line and insert the new one.
212 0782      -
213 0783      MOVELINE (EDT$A_WK_LN [LIN_NUM], SAVE_LIN);
214 0784      SAVE_SELPOS = .EDT$A_SEL_POS;
215 0785      SAVE_REBUILD = .EDT$G_SCR_REBUILD;
216 0786      EDT$G_SCR_REBUILD = 1;
217 0787      EDT$DEL_CURLN ();
218 0788      SUBLIN (NUMBER ONE, EDT$L_WK_INSCNT);
219 0789      EDT$INS_LN (.NEWLINE, .LEN);
220 0790      EDT$RD_PRVLN ();
221 0791      EDT$G_SCR_REBUILD = .SAVE_REBUILD;
222 0792      EDT$A_SEL_POS = .SAVE_SELPOS;
223 0793      MOVELINE (SAVE_LIN, EDT$A_WK_LN [LIN_NUM]);
224 0794      RETURN;
225 0795      END;
226 0796      1

```

! of routine EDT\$RPL\_LN

.TITLE EDT\$WFREPLIN EDT\$WFREPLIN - replace the current  
line

.IDENT \V04-000\

.EXTRN EDT\$DEL\_CURLN, EDT\$INS\_LN  
.EXTRN EDT\$RD\_PRVLN, EDT\$A\_WK\_LN  
.EXTRN EDT\$G\_WK\_MODFD  
.EXTRN EDT\$L\_LN00, EDT\$A\_CUR\_BUF  
.EXTRN EDT\$A\_WK\_BUK, EDT\$A\_SEL\_POS  
.EXTRN EDT\$G\_SCR\_REBUILD  
.EXTRN EDT\$L\_WK\_INSCNT

.PSECT \_EDT\$CODE, NOWRT, SHR, PIC, 2

.ENTRY EDT\$RPL\_LN, Save R2,R3,R4,R5,R6,R7,R8,R9,- : 0663  
R10,R11

```

MOVAB EDT$G_SCR_REBUILD, R11
MOVAB EDT$A_CUR_BUF, R10
MOVAB FIRST_WORD, R9
SUBL2 #8, SP
MOVL EDT$A_WK_LN, R7 : 0737
MOVZBL (R7), OLD_LEN
MOVL LEN, R8 : 0739
CMPL OLD_LEN, R8
BNEQ 1$
MOVC3 R8, @NEWLINE, 7(R7) : 0742
BRB 3$ : 0743
MOVL EDT$A_WK_BUK, R2 : 0753
SUBL3 OLD_LEN, 4(R2), R3
ADDL2 R8, R3
CMPL R3, #512
BGEQ 4$
MOVL EDT$A_CUR_BUF, R0 : 0754

```

```

OFFC 00000
5B 00000000G 00 9E 00002
5A 00000000G 00 9E 00009
59 00000000G 00 9E 00010
5E 00000000G 08 C2 00017
57 00000000G 00 D0 0001A
56 67 9A 00021
58 08 AC D0 00024
58 56 D1 00028
07 A7 04 BC 08 12 0002B
53 04 A2 58 28 0002D
00000200 53 61 11 00033
8F 52 00000000G 00 D0 00035 1$:
53 56 C3 0003C
53 58 C0 00041
8F 53 D1 00044
50 51 18 0004B
50 6A D0 0004D

```

EDT\$WFREPLIN  
V04-000

EDT\$WFREPLIN - replace the current line  
EDT\$SRPL\_LN - replace the current line

E 14  
16-Sep-1984 02:13:03  
14-Sep-1984 12:25:42

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[EDT.SRC]WFREPLIN.BLI;1  
Page 6  
(3)

EDT  
V04

04	A2	60	D1	00050	CMPL	(R0), 4(R2)	:	
		48	13	00054	BEQL	4\$	:	
	50	6A	D0	00056	MOVL	EDT\$SA_CUR_BUF, R0	:	0755
	08	60	D1	00059	CMPL	(R0), #8	:	
		40	13	0005C	BEQL	4\$	:	
	51	6A	D0	0005E	MOVL	EDT\$SA_CUR_BUF, R1	:	0761
1E	50	1E	A1	56	C3	00061	SUBL3	OLD_LEN, 30(R1), R0
	A1		50	58	C1	00066	ADDL3	R8, -R0, 30(R1)
			50	A6	9E	0006B	MOVAB	8(R6), SIZE
	54		57	50	C1	0006F	ADDL3	SIZE, R7, SOURCE
	51	04	A2	61	C3	00073	SUBL3	(R1), 4(R2), R1
	50		51	50	C3	00078	SUBL3	SIZE, R1, REMAINING
		04	A2	53	D0	0007C	MOVL	R3, 4(R2)
				50	D5	00080	TSTL	REMAINING
				06	13	00082	BEQL	2\$
08	A847		64	50	28	00084	MOVC3	REMAINING, (SOURCE), 8(R8)[R7]
			67	58	90	0008A	2\$:	MOVB
07	A7	04	BC	58	28	0008D	MOVC3	R8, (R7)
			63	58	90	00093	MOVB	R8, @NEWLINE, 7(R7)
	00000000G	00		01	D0	00096	3\$:	MOVL
					04	0009D	RET	#1, EDT\$G_WK_MODFD
6E		01	A7	06	28	0009E	4\$:	MOVC3
			53	00	D0	000A3	MOVL	#6, 1(R7), SAVE_LIN
			52	6B	D0	000AA	MOVL	EDT\$SA_SEL_POS, -SAVE_SELPOS
			6B	01	D0	000AD	MOVL	EDT\$G_SCR_REBUILD, SAVE_REBUILD
	00000000G	00		00	FB	000B0	MOVL	#1, EDT\$G_SCR_REBUILD
			50	69	D0	000B7	CALLS	#0, EDT\$DEL_CORLN
				69	D7	000BA	MOVL	FIRST_WORD, SAVE
			50	69	D1	000BC	DECL	FIRST_WORD
				03	1B	000BF	CMPL	FIRST_WORD, SAVE
				04	A9	B7	000C1	BLEQU
				58	DD	000C4	5\$:	DECW
			04	AC	DD	000C6	PUSHL	NEXT_WORD
	00000000G	00		02	FB	000C9	PUSHL	R8
	00000000G	00		00	FB	000D0	CALLS	NEWLINE
		6B		52	D0	000D7	CALLS	#2, EDT\$INS_LN
	00000000G	00		53	D0	000DA	CALLS	#0, EDT\$RD_PRVLN
		50	00000000G	00	D0	000E1	MOVL	SAVE_REBUILD, EDT\$G_SCR_REBUILD
01	A0	6E		06	28	000E8	MOVL	SAVE_SELPOS, EDT\$SA_SEL_POS
				04	000ED		MOVL	EDT\$SA_WK_LN, R0
							MOVC3	EDT\$SA_WK_LN, R0
							RET	#6, SAVE_LIN, 1(R0)
								:
								0796

; Routine Size: 238 bytes, Routine Base: \_EDT\$CODE + 0000

; 227 0797 1  
; 228 0798 1 !<BLF/PAGE>



EDT\$WFREPLIN  
V04-000

EDT\$WFREPLIN - replace the current line  
EDT\$SRPL\_LN - replace the current line

F 14  
16-Sep-1984 02:13:03  
14-Sep-1984 12:25:42

VAX-11 Bliss-32 V4.0-742  
DISK\$VMSMASTER:[EDT.SRC]WFREPLIN.BLI;1 (4) Page 7

: 230 0799 1 END  
: 231 0800 1  
: 232 0801 0 ELUDOM

! of module EDT\$WFREPLIN

### PSECT SUMMARY

Name	Bytes	Attributes
_EDT\$CODE	238	NOVEC,NOWRT, RD , EXE, SHR, LCL, REL, CON, PIC,ALIGN(2)

### Library Statistics

File	----- Total	Symbols Loaded	----- Percent	Pages Mapped	Processing Time
_\$255\$DUA28:[EDT.SRC]EDT.L32;1	377	48	12	40	00:00.2
_\$255\$DUA28:[EDT.SRC]PSECTS.L32;1	2	1	50	7	00:00.1

### COMMAND QUALIFIERS

BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/NOTRACEBACK/LIS=LISS:WFREPLIN/OBJ=OBJ\$:WFREPLIN MSRC\$:WFREPLIN.BLI/UPDATE=(ENH\$:WFREPLIN)

: Size: 238 code + 0 data bytes  
: Run Time: 00:16.3  
: Elapsed Time: 00:20.0  
: Lines/CPU Min: 2955  
: Lexemes/CPU-Min: 11904  
: Memory Used: 121 pages  
: Compilation Complete



0141

AH-BT13A-SE  
VAX/VMS V4.0

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